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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

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DENVER COLORADO 80202 2466

Ref 8HWM FF

AUG 8 1994

Mr Steve Slaten
Department of Energy
Rocky Flats Office
P O Box 928
Golden Colorado 80402 0928

RE Draft Proposed Action Memorandum Operable Unit No 1 Hot
Spot Removal

Dear Mr Slaten

EPA has reviewed the draft Proposed Action Memorandum (PAM) referenced above and has assembled the following comments In general this document presents most of the information required for a PAM as specified in the proposed amendment of the IAG EPA generally agrees that known hot spots should be removed from the site as soon as possible especially when they are as small in extent as those at OU 1 However as explained below EPA has several important concerns with this document and the activities that it proposes

Major Comments

1 Cost It was assumed that a technologically simple and small scale removal such as this would also be very inexpensive but surprisingly DOE has estimated that the project will cost \$390 000 not including possible treatment storage and disposal costs This cost estimate is only divided into two broad categories in the draft PAM Planning and Management \$180 000 and Construction and Contingency \$210 000 These figures must be presented in much more detail in the PAM showing exactly why it costs so much to perform this project As proposed this is definitely not a cost effective solution to the health risks posed by these hot spots

2 Threats to Public Health The threats to public health presented in this document are taken directly from the Final OU 1 RFI/RI Report (June 1994) Nevertheless, this document states that a carcinogenic risk of 1.1×10^{-4} (for a current on site worker) exceeds the acceptable range but in the RI Report DOE states that the same risk is within the acceptable range Contradictory statements such as these seriously undermine the veracity of DOE documents and corrections must be made to one or both of these documents so that DOE's conclusions are consistent and believable

The risk cited above is driven by plutonium and americium in

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surface soils which were detected at significantly elevated activities in only one of the four hot spots discussed in the document. Risks from the uranium "hot spots" must also be weighed. Additionally, although contaminant migration via surface water runoff is a consideration, this document ignores several factors that have limited this migration from occurring since the contaminants were released to the environment some 25 years ago. In general, section 3.1 provides a simplistic and somewhat distorted presentation of the risks to current workers and to the public, and it should be rewritten to present a more realistic characterization of the precise threat to public health that would be the basis for taking an action.

3 Screening of Options Option 3 is described as emplacing caps over the hot spots to prevent human exposure and reduce the potential for contaminant migration. In Section 5.2.1.3, this option is eliminated from further consideration on the basis that it does not provide a permanent remedy and that it may be inconsistent with an as yet undetermined final remedy for OU 1. This is not an appropriate basis for elimination since the remedy chosen for this response action need not be permanent and it is unlikely that capping would be inconsistent with the final remedy chosen. Actually, capping might be the most cost effective and reasonable option for a number of reasons: no sampling would be required, and therefore no laboratory analytical or validation costs, no excavation costs, and less overall project management costs. Finally, it would very likely allow the hot spots to be incorporated with the final remedy for the much greater volume of OU 1 and 2 surficial soils that are contaminated with the same radionuclides at minimal added cost. Therefore, DOE must further evaluate a capping option in the revised PAM.

4 Field Detection Limits The procedure for excavation of contaminated soils outlined in this document is directly tied to the use of field radiation detectors. Therefore, it is necessary to state the minimum detectable activity in picocuries per gram for each radionuclide of interest according to the specific method and instrument to be used in the field. Development of the confirmation sampling plan also depends on using a reliable standard deviation input for these measurements. This could be generated by repeated measurements, preferably 10 or more, made using the field detection instruments in the same manner as they are proposed to be employed for this action. Such information is important so that all parties involved have a good understanding of the use of field radiation detectors for such purposes.

Other Comments

1 Page 11, last paragraph It is stated here that unique ecosystems were not found at RFP during extensive biological studies. This statement must be deleted since biological studies for all portions of the plant site have not been completed or

submitted for agency review

2 Page 15, paragraph 3 The second sentence in this paragraph does not make sense as written and should be revised or deleted

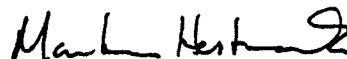
3 Page 17, Table 2-4 The radionuclide activity data presented in this table and in figures 4 17, 4-18 and 4 19 of the OU 1 RFI/RI Report raise the question of whether locations SS100193 SS100293 or SS100393 really need to be addressed through an accelerated response action The activities found in samples taken from location SS100393 are actually quite similar to those of the samples from surrounding locations Also, as noted in EPA's previous comments regarding the Sampling and Analysis Plan some of the locations sampled in 1987 actually had higher activities than the three mentioned above A better analysis of the health risks involved should help clarify which locations need accelerated action

4 Page 20 paragraph 3 The OU 1 IM/IRA actually began collection and treatment of groundwater in April 1992 not in August 1991 as stated here

5 Page 22 paragraph 2 The first sentence in this paragraph mentions the "revised 1994 IAG" Until IAG renegotiations are completed no revised 1994 version exists and as such the sentence should be corrected

If you have any questions concerning these matters please contact Gary Kleeman of my staff at 294 1071

Sincerely



Martin Hestmark Manager
Rocky Flats Project

cc Scott Grace DOE
Zeke Houk EG&G
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